

REMARKS

The Examiner is thanked for the careful examination of the application. However, in view of the following remarks, the Examiner is respectfully requested to reconsider and withdraw the outstanding rejections.

Claims 1-17 are pending. Claims 14-16 have been withdrawn. Claims 1-13 are directed to elected subject matter. By this Amendment, claims 1-3, 9 and 12 are amended and new claim 17 is added. Support for new claim 17 can be found in the specification at paragraph 83. No new matter has been added.

Applicant appreciates the courtesies extended to Applicant's representative during the August 8, 2007 personal interview. The substance of the discussions held are incorporated into the amendments and remarks herein and constitute Applicant's record of the interview.

Claims 1, 9 and 12 have been amended to address the issues raised under 35 U.S.C. §112. The amendments do not change the scope of the claims. The Examiner is respectfully requested to reconsider and withdraw the rejection of claims 1, 9 and 12 under 35 U.S.C. §112.

The Office Action rejects claims 1-13 under 35 U.S.C. §102(e) over U.S. Patent No. 6,493,470 to Ikeda et al. This rejection is respectfully traversed.

Claim 1 is directed to an image processing method including a first step of detecting a data region from input image data. A second step rotates the input image data including the data region in accordance with inclination of an image within the input image data. A third step detects whether the rotated input image data region protrudes from the input image data previous to rotation and a fourth

step extracts the smallest area including the rotated input image data region when a protrusion is detected at the third step.

In a non-limiting example the following portions of the specification are referred to for purposes of explanation. Fig. 12B corresponds to image information 502 previous to rotation. Regions 511 and 512 are extracted from image information 502. Fig. 12C shows image information 503 which is image information 502 and regions 511 and 512 after being rotated by the inclination of image information 502. In Fig. 12C a determination is made whether the rotated regions 511 and 512 protrude from the image information 502. If a protrusion is detected, the smallest area, including rotated regions 511 and 512, is extracted.

The Examiner relies on Ikeda for allegedly teaching the image processing steps of claim 1. However, the Office Action asserts that step 208 shown in Fig. 2 is equivalent to the second step of claim 1 of rotating the input image data in accordance with an inclination of an image within the input image data. As discussed at column 6, lines 6-9 of Ikeda, by shifting the strip of the width obtained by the tilt amount, there is an effect such that the tilt of the image can be eliminated and corrected. Thus, rotating the image is the final step in Ikeda and not the second step.

Furthermore, the Examiner alleges that the shifting disclosed in Ikeda at column 5, line 59 through column 6, line 5, corresponds to the third step of claim 1 of detecting whether the rotated input image data region protrudes from the input image data. However, shifting described at column 5, line 59 through column 6, line 5 is the same as step 208, eliminating the tilt of the image, alleged to be the second step. The Office Action alleges that the same step of Ikeda relates to the second and third

steps of claim 1. However, the shifting takes place prior to the tilt of the image to be corrected. Thus, the Office Action reverses the order of the second and third steps of Ikeda.

The Office Action alleges at paragraph 6c that Ikeda discloses detecting whether the rotated data region, Fig. 8B relative to Fig. 8A, protrudes from the input image data. However, Fig. 8B shows aligning the strips in the tilt direction. The dotted line representing image 801 is shown for comparison purposes only. No detecting step is disclosed in Ikeda.

The Office Action asserts that the fourth step of extracting the smallest area including the rotated input image data region when protrusion is detected at the third step is disclosed in Ikeda at column 5, line 43, which refers to a character recognizing process. However, the character recognizing process discussed in Ikeda relates to an image whose tilt was eliminated and corrected in step 208. There is no disclosure of extracting the smallest area when a protrusion is detected, as required by the fourth step of claim 1.

On pages 7 and 8, the Office Action includes second and third rejections of claim 1 based on Figs. 3, 4 and 6 of Ikeda. Figs. 3 and 4 relate to steps 203 and 204 of Fig. 2. As disclosed in column 3, lines 25-57, of Ikeda, there is no feature which corresponds to rotating the input image data as in claim 1. Instead, the image in the check area is analyzed and a document direction is obtained. In Fig. 6, the tilt amount of the document is determined. One check window is shifted in the direction normal to the document typesetting direction in a predetermined tilt amount range and a correlation of the projections of two check windows is obtained. In Fig. 6, there are no features which correspond to rotating the input image data including the

data region and detecting whether the rotated data region protrudes from the input image data.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejections of claim 1.

Claims 2-13 depend from claim 1 and are thus also patentable over the prior art, for at least the reasons set forth above with respect to claim 1.

In view of the foregoing remarks, the Examiner is respectfully urged to reconsider and withdraw the outstanding rejections.

In the event that there are any questions concerning this response, or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney so that prosecution of this application may be expedited.

In the event that this paper is not timely filed within the currently set shortened statutory period, Applicants respectfully petitions for an appropriate extension of time. The fees for such extension of time may be charged to Deposit Account No. 02-4800.

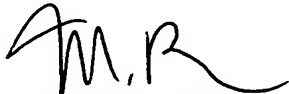
In the event that any additional fees are due with this paper, please charge our Deposit Account No. 02-4800.

Respectfully submitted,

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